RECEIVED
CENTRAL FAX CENTER
APR 07 2008

AMENDMENTS

In the Claims

Current Status of Claims

1.**(canceled)**
2.**(canceled)**
3.**(canceled)**
4.**(canceled)**
5.**(canceled)**
6.**(canceled)**
7.**(canceled)**
8.**(canceled)**
9.**(canceled)**
10.**(canceled)**
11.**(canceled)**
12.**(canceled)**
13.**(canceled)**
14.**(canceled)**
15.**(canceled)**
16.**(canceled)**
17.**(canceled)**
18.**(canceled)**
19.**(canceled)**
20.**(canceled)**
21.**(canceled)**
22.**(canceled)**
23.**(canceled)**
24.**(canceled)**
25.**(canceled)**
26.**(canceled)**
27.**(canceled)**
28.**(canceled)**
29.**(canceled)**
30.**(canceled)**
31.**(canceled)**
32.**(canceled)**
33.**(canceled)**
34.**(canceled)**
35.**(canceled)**
36.**(canceled)**

37.**(withdrawn)** A circular extrusion die comprising

distribution section for forming at least a first molten polymer material into a generally even circular flow, and

bodily separate from said distribution section an exit section comprising

an annular main channel with generally cylindrical or conical walls for receiving said generally circular flow of said first polymer material and conducting the same to an annular exit orifice to exit there from as a tubular film structure,

said exit section also comprising a channel system spaced radially from said main channel for extrusion from the circumference of said exit section of a circular array of narrow strands of a second molten polymer material,

said channel system ending in a circular row of internal orifices opening into a circular wall portion of the main channel upstream of said exit orifice so that said circular array of said second polymer material merges with the circular flow of said first polymer material as circumferentially spaced strands superimposed on said circular flow.

38.**(withdrawn)** A circular extrusion die according to claim 37 wherein said channel system for said circumferential extrusion begins at at least one inlet in said exit section and comprises

for delivering said second polymer material to each said internal orifice a labyrinthine sub-channel system communicating at one end with such inlet and at the other end with the respective internal orifice,

said sub-channel system comprising at least three channel-branchings between said ends to promote a balanced division of polymer flow to said internal orifices.

39.**(canceled)**
40.**(canceled)**
41.**(canceled)**
42.**(canceled)**
43.**(canceled)**
44.**(canceled)**
45.**(canceled)**
46.**(canceled)**
47.**(canceled)**
48.**(canceled)**
49.**(canceled)**
50.**(canceled)**
51.**(canceled)**
52.**(canceled)**
53.**(canceled)**
54.**(canceled)**
55.**(canceled)**
56.**(canceled)**
57.**(canceled)**

58.**(canceled)**
59.**(canceled)**
60.**(canceled)**
61.**(canceled)**
62.**(canceled)**
63.**(canceled)**
64.**(canceled)**
65.**(canceled)**
66.**(canceled)**
67.**(canceled)**
68.**(canceled)**
69.**(canceled)**
70.**(canceled)**
71.**(canceled)**
72.**(canceled)**
73.**(canceled)**

74.**(withdrawn)** A circular extrusion die according to claim 38 which further comprises a small circumferential channel in said wall portion of said circular main channel upstream of the exit thereof, said internal orifices opening in common into said small channel.

75.**(withdrawn)** An extrusion die according to claim 37 which further comprises an additional circular channel for extruding a circular flow of a third molten polymer material on the side of said generally circular flow of said first polymer material facing said circular array of narrow strands of said second material upstream of the point where the circular array merges with first circular flow to thereby form on the first circular flow of said first polymer material a continuous layer of said third polymer material underlying said circular array of narrow strands upon its merger with the first circular flow.

76.**(canceled)**
77.**(canceled)**
78.**(canceled)**
79.**(canceled)**
80.**(canceled)**
81.**(canceled)**
82.**(canceled)**
83.**(canceled)**
84.**(canceled)**
84.**(canceled)**
85.**(canceled)**
86.**(canceled)**

87.**(canceled)**
88.**(canceled)**
89.**(canceled)**
90.**(canceled)**
91.**(canceled)**
92.**(canceled)**
93.**(canceled)**
94.**(canceled)**
95.**(canceled)**
96.**(canceled)**
97.**(canceled)**
98.**(canceled)**
99.**(canceled)**
100.**(canceled)**

101.**(withdrawn)** A method of manufacturing a cross-laminate comprising at least two polymer films A and B which comprises:

separately forming each of said at least two films A and B by coextruding:

a main layer of a polymer material selected to give high tensile strength,

a discontinuous first surface layer of a different polymer material forming an array of thin strands extending in the direction of extrusion and

interposed between said main layer and its first surface layer a continuous second surface layer of a different polymer material

and imparting to each of said polymer films a uniaxial or unbalanced biaxial molecular orientation;

bringing said films A and B together in sandwich relation with said main directions of orientation in crossing relation with the said arrays on mutually facing sides of said films and the directions of the strands in said arrays in crossing relation and

laminating said films A and B together at least partly by heating to form a laminate;

selecting the polymer material of said continuous second layers to control the lamination strength in the strand-free regions thereof; and

selecting the polymer material of the strands of the each such array to control the lamination strength at the crossing points of the strand arrays such that the lamination strength is highest at the strand crossing points.

102.**(withdrawn)** A method according to claim 101 wherein:

at least one of said films A or B is coextruded as a tubular film,

orientation is imparted to said tubular film by drawing down the same while twisting to give a helical direction of orientation thereto,

and comprising the further step of:

subsequently cutting open said tubular film at an angle to the main direction of orientation and to the direction of said array of strands thereof.

103.**(withdrawn)** A method according to claim 101 wherein:

at least one of said films A and B is coextruded in a circular coextrusion die in tubular form with a circumference at the exit of said die of at least 20 cm, and

the first surface layer thereof is coextruded discontinuously so that the distance from center-to-center of adjacent strands in the tubular film at the exit from said die is at the highest 4 cm.

104.**(withdrawn)** A method according to claim 101 which comprises the further step of:

after said films are brought together in said sandwich arrangement and before, after or simultaneously with their being laminated together, stretching said films in their longitudinal or transverse directions or both to further orient the same.

105.**(withdrawn)** The method according to claim 101 wherein:

said films A and B are brought together in said sandwich relation with said strand arrays in direct contact to be directly sealed together upon lamination.

106.**(withdrawn)** The method according to claim 101 wherein:

film A is coextruded as a five-layer assembly

having said main layer

with at least one of said first surface layers and

a second surface layer coextruded on both of the opposite sides of said main layer; and

said five-layer film A is brought together with a said film B on each of its opposite sides

so arranged that the arrays of strands of the first surface layer of each said film B are in crossing relation with an array of strands of a first surface layer of said film A proximate thereto.

107.**(withdrawn)** A method according to claim 101 wherein:

at least one additional film C is brought together with at least one of said films A and B on a side opposite said strand array of the latter,

said film C comprising:

a main layer of a polymer material selected to give high tensile strength and

a continuous surface layer of a different polymer material on the side thereof facing said at least one of said films A and B,

the polymer material of said continuous surface layer being adapted when the films are is laminated to produce a higher lamination strength of said film C with said opposite side of said at least one of films A and B than the lamination strength between films A and B in the strand-free regions thereof.

108.(**withdrawn**) A method according to claim 101 wherein:

the separate coextrusions of said films A and B are so controlled that the relative rates of extrusion flow of the polymeric materials of said main, second and first surface layers of said films A and B are such that said first surface layer on each of the films A and B constitutes at the highest 10% of the volume of the respective film A or B.

109.(**withdrawn**) A method according to claim 101 wherein:

the average melting point of the polymer material of said strand-formed first surface layer of each of said films A and B is at least about 10°C lower than the average melting point of the polymer material of the main layer thereof.

110.(**withdrawn**) The method according to claim 101 wherein the polymer material of the strand-formed array of at least one of said films A and B comprises coloration material in sufficient amount and/or coloration to render the strands visible through at least one side of the cross-laminate.

111.(**withdrawn**) A method according to claim 101 wherein:

the polymer materials of said main layer and said second continuous layer of said film A are sufficiently transparent to render the strands of said first surface layer thereof visible therethrough, and

coextrusion conditions for the respective films are controlled so that the general thickness of the final laminate is not more than about 0.3 mm, which further comprises:

embossing at least the exterior surface of said film A into corrugations forming a pattern of striations extending in one direction with corresponding thickness variations in said film,

the separation between the striations in said pattern being not more than about 3 mm and

the depth of the corrugations being sufficient to impart a three-dimensional effect to the cross-laminate such that the strands when viewed from the A-side appear to be spaced internally from the exterior surface of said film a distance substantially greater than the actual maximum thickness of said film A.

112.**(withdrawn)** A method according to claim 111 wherein: said embossing is carried out by:

passing said films A and B after they have been brought together in sandwich relation and:

before or after said films have been laminated through at least one pair of mutually intermeshing grooved rollers to form said corrugations while simultaneously effecting a transverse stretching of the same.

113.**(withdrawn)** A method according to claim 101 wherein:

the separate coextrusions of said films A and B are so controlled that the relative rates of extrusion flow of the polymeric materials of said main, second and first surface layers of said films A and B are such that said first surface layer on each of the films A and B constitutes at the highest 5% of the volume of the respective film A or B.

114.**(withdrawn)** A method according to claim 101 wherein;

the average melting point of the polymer material of said stand-formed first layer of each of said films A and B is at least about 20°C lower than the average melting point of the polymer material of the main layer thereof.

115.**(withdrawn)** A method according to claim 102 wherein:

said first surface layer of said tubular film is coextruded discontinuously so that the distance from center-to-center of adjacent strands thereof is at most 20 mm.

116.**(withdrawn)** A method according to claim 101 wherein: said laminating comprises:

extruding between said films A and B an intermediate layer of a molten polymer material selected to effect lamination of the films as they are brought together in sandwich relation and

cooled.

117.**(withdrawn)** A method according to claim 101 which further comprises

coextruding at least one of said films A and B with a said discontinuous surface layer on both of its sides,

separately coextruding a film C having a said main layer with a said first discontinuous surface layer and a said second continuous surface layer on at least one of its sides and

laminating said film C to an exterior side of at least one of said films A and B with the first surface layer of film C facing said exterior side before, during or after films A and B are brought together in said sandwich relation to laminate the said films A, B and C together,

the polymer material of the surface layer of said film C being selected in association with the lamination conditions to produce a stronger lamination at the crossing points of the strands of its first surface layer and the strands of the adjacent first surface layer of said film A or B than in the strand-free regions thereof.

118.**(canceled)**
119.**(canceled)**
120.**(canceled)**
121.**(canceled)**
122.**(canceled)**

123.**(new)** A cross-laminate comprising:

a first coextruded film A having a main direction of uniaxial or unbalanced biaxial molecular orientation and including:

a continuous main layer comprising a first polymer material selected to have a high tensile strength,

a continuous bonding layer comprising a second polymer material and disposed on a surface of the main layer, and

a discontinuous layer comprising at least one array of substantially parallel strands, where the discontinuous layer is disposed on a top surface of the bonding layer, and where the discontinuous layer comprises a third polymer material different from the first and second polymer materials,

a second coextruded film B having a main direction of uniaxial or unbalanced biaxial molecular orientation and including:

a continuous main layer comprising a fourth polymer material selected to have a high tensile strength,

a continuous bonding layer comprising a fifth polymer material and disposed on a surface of the main layer, and

a discontinuous surface layer comprising at least one array of substantially parallel strands, where the discontinuous layer is disposed on a top surface of the bonding layer, and where the discontinuous layer comprises a sixth polymer material different from the fourth and fifth polymer materials,

where the film B is arranged such that the film B main direction crosses the film A main direction and the film B strands cross the film A strands,

first bonds formed at intersections of the film A strands and the film B strands,

second bonds formed between the film A bonding layer and the film B strands or the film B bonding layer and the film A strands, and

third bonds formed between the film A bonding layer and the film B bonding layer in regions devoid of the film A stands and the film B strands,

where the first bonds have a higher bond strength than a bond strength of the third bonds.

124.(new) The cross-laminate according to claim 123, further comprising:

an exterior layer formed on an exterior surface of at least the film B comprising a exterior layer polymer material adapted to enhance a surface property of the laminate, where the property is selected from the group consisting of its heat-sealing capability and its frictional property.

125.(new) The cross-laminate according to claim 123, wherein the second bonds have a bond strength greater than the bond strength of the third bonds.

126.(new) The cross-laminate according to claim 123, wherein the first bonds comprise direct strand to strand lamination at crossing points of the film A strands and the film B strands.

127.(new) The cross-laminate according to claim 123, further comprising:

a continuous extrusion lamination layer introduced between the films A and B adapted to laminate the films together.

128.(**new**) The cross-laminate according to claim 123, wherein a collective area of the film A strands and film B strands comprises no more than 60% of a surface area of their respective film sides.

129.(**new**) The cross-laminate according to claim 123, wherein a thickness increase of the films A and B at their respective strand locations is at most 20% of a film thickness of the films A and B in adjacent regions of the films A and B devoid of their respective discontinuous layers.

130.(**new**) The cross-laminate according to claim 123, wherein a thickness increase of the films A and B at their respective strand locations is at most 10% of a film thickness of the films A and B in adjacent regions of the films A and B devoid of their respective discontinuous layers.

131.(**new**) The cross-laminate according to claim 123, wherein a volume of the film A strands and the film B strands is not greater than 15% of a volume of their respective films.

132.(**new**) The cross-laminate according to claim 123, wherein a volume of the film A strands and the film B strands is not greater than 10% of a volume of their respective films.

133.(**new**) The cross-laminate according to claim 123, wherein a volume of the film A strands and the film B strands is not greater than 5% of a volume of their respective films.

134.(**new**) The cross-laminate according to claim 123, wherein a distance from a center-to-center of adjacent pairs of strands in each array is between 2 mm and 40 mm.

135.(**new**) The cross-laminate according to claim 134, wherein the distance from a center-to-center of adjacent pairs of strands in each array is at the highest 20 mm.

136.(**new**) The cross-laminate according to claim 123, wherein:

the bond strength of the first bonds is at least 40 g cm^{-1}, as measured by a peel test carried out on narrow specimens of the cross-laminate at a velocity of about 1 mm sec^{-1}, and

the bond strength of the third bonds are less than or equal to 75% of the bond strength of the first bonds, as measured by the peel test.

137.**(new)** The cross-laminate according to claim 136, wherein the bond strength of the third bonds are less than or equal to 50% of the bond strength of the first bonds, as measured by the peel test.

138.**(new)** The cross-laminate according to claim 123, wherein an average melting point of the third polymer material and average melting point of the sixth polymer materials are at least about 10°C lower than an average melting point of the first polymer material and an average melting point of the fourth polymer material.

139.**(new)** The cross-laminate according to claim 123, wherein an average melting point of the third polymer material and average melting point of the sixth polymer materials are at least about 15°C lower than an average melting point of the first polymer material and an average melting point of the fourth polymer material.

140.**(new)** The cross-laminate according to claim 123, wherein an average melting point of the third polymer material and average melting point of the sixth polymer materials are at least about 20°C lower than an average melting point of the first polymer material and an average melting point of the fourth polymer material.

141.**(new)** The cross-laminate according to claim 123, wherein the main layer of each of the two films A and B consists essentially of polyethylene or polypropylene.

142.**(new)** The cross-laminate according to claim 123, wherein:

the main layers are selected from the group consisting of HDPE, LLDPE or a blend of the two,

the bonding layers comprise LLDPE in admixture with 5 - 25% of a copolymer of ethylene having a melting point or a melting range within the temperature range of 50 - 80°C, and

the discontinuous layers comprise a polymer consisting essentially of a copolymer of ethylene having a melting point or a melting range within the temperature range of 50 - 100°C or a blend of such copolymer and LLDPE containing at least 25% of the the copolymer.

143.(new) The cross-laminate according to claim 123, wherein the bonding layers include an adhesion modifying material adapted to establish a blocking of the contacting mutually facing surfaces of the films A and B to each other in regions devoid the their discontinuous layers.

144.(new) The cross-laminate according to claim 123, wherein:

at least one of the discontinuous layers comprises at least two of arrays of strands,

at least one of the two arrays of strands being formed of a polymer material differing in composition, color and/or appearance from the other of the two arrays of strands and

where the strands of the two arrays are interspersed.

145.(new) The cross-laminate according to claim 123, wherein the polymer material of the discontinuous layer of at least one of the films A and B comprises a coloration material in an amount, a coloration, or an amount and coloration to form a colored discontinuous layer sufficient to render the colored discontinuous layer visible through at least one side of the cross-laminate.

146.(new) The cross-laminate according to claim 145, wherein the cross-laminate has a thickness at its thickest of about 0.3 mm, and:

wherein an exterior surface of the film A is corrugated to form a visible pattern of striations extending in one direction,

where a spacing of the striations being at most about 3 mm,

the main layer and the bonding layer of the film A are substantially transparent to enable the colored strands to be visible when the laminate is observed from one of the exterior surfaces of the cross-laminate, and

a depth of the corrugations is sufficient to impart a three-dimensional effect to the cross-laminate such that the strands appear to be spaced internally from the exterior surface of the film A a distance substantially greater than an actual maximum thickness of the film A.

147.(new) A cross-laminate according to claim 123, wherein the film A further includes:

a second continuous bonding layer comprising an seventh polymer material and disposed on a second surface of the main layer, and

a second discontinuous layer comprising at least one array of substantially parallel strands and disposed on a top surface of the second bonding layer, where the second

discontinuous layer comprises a eighth polymer material different from the first polymer material and seventh polymer material, and

the cross-laminate further comprising:

a third film C having a main direction of uniaxial or unbalanced biaxial molecular orientation and including:

a continuous main layer comprising a ninth polymer material having a high tensile strength,

a continuous bonding layer comprising a tenth polymer material and disposed on a surface of the main layer, and

a discontinuous surface layer comprising at least one array of substantially parallel strands and disposed on a top surface of the bonding layer, where the discontinuous layer comprises an eleventh polymer material different from the ninth and tenth polymer materials,

where the film C is arranged such the film C main direction crosses the film A main direction and the film C strands cross the film A stands,

fourth bonds formed at intersections of the film A strands and the film C strands,

fifth bonds formed between the film A bonding layer and the film C strands or the film C bonding layer and the film A strands, and

sixth bonds formed between the film A bonding layer and the film C bonding layer in regions devoid of the film A stands and the film C strands,

where the fourth bonds have a higher bond strength than the sixth bonds.

148.(**new**) The cross-laminate according to claim 148, further comprising:

an exterior layer formed on an exterior surface of at least the film B or the film C comprising a polymer material adapted to enhance a surface property of the laminate, where the property is selected from the group consisting of its heat-sealing capability and its frictional property.